

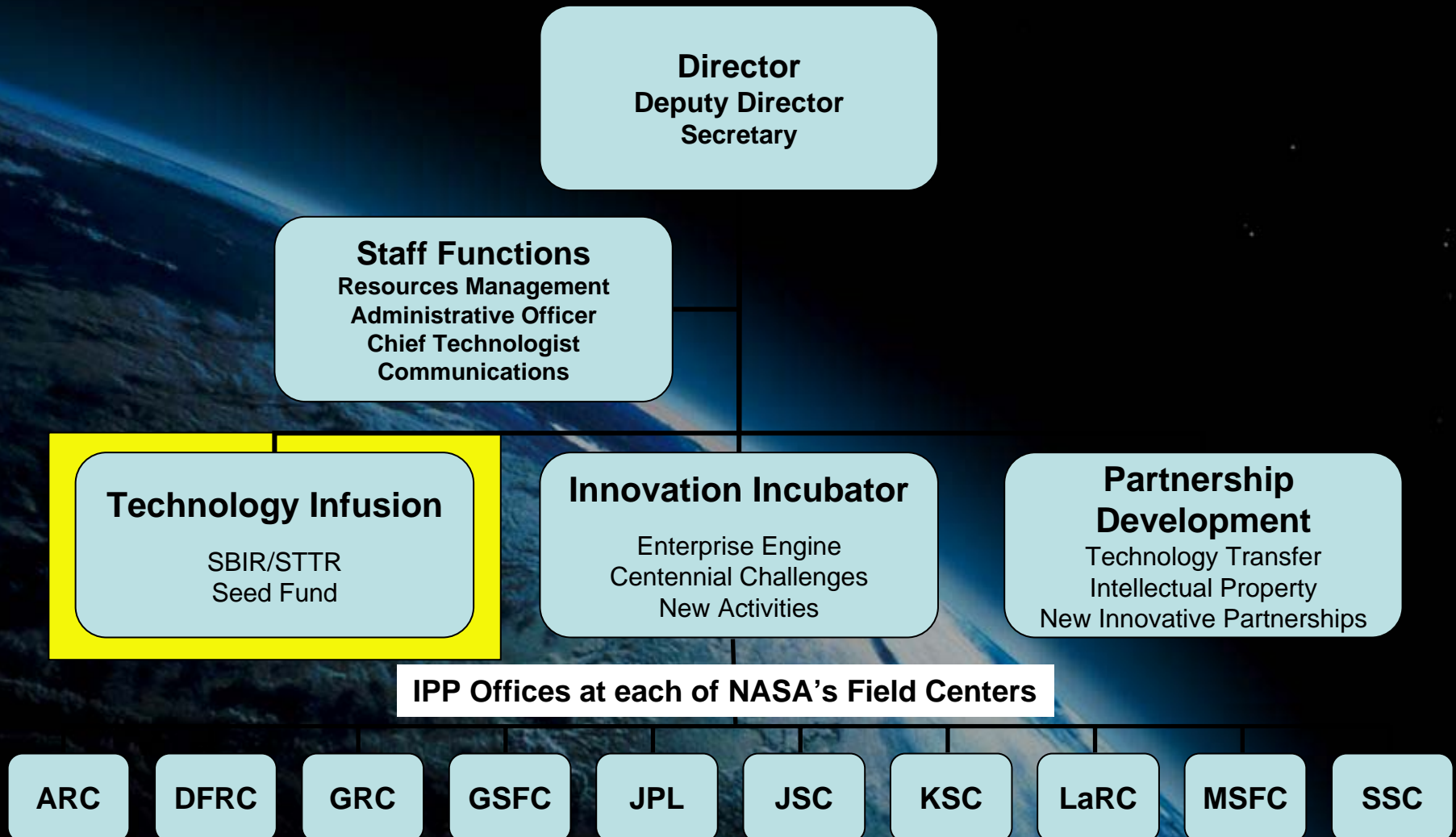


Small Business Innovation Research (SBIR) & Small Business Technology Transfer (STTR) Overview

Gary Jahns
NASA SBIR/STTR Program Manager

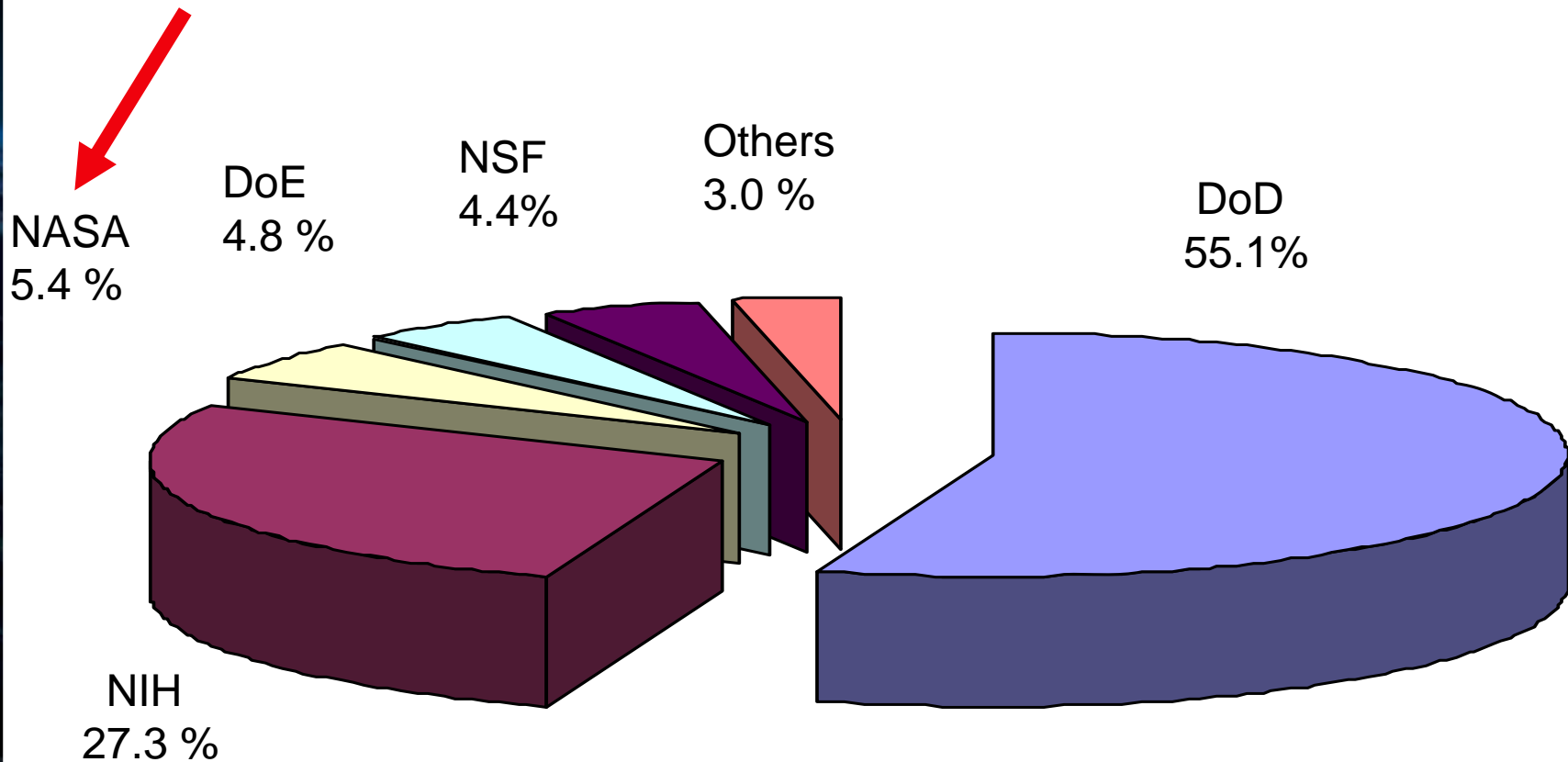


Innovative Partnerships Program Office





SBIR/STTR Agency Funding FY 2006 \$2.3 Billion





NASA SBIR/STTR 2007 Budget

SBIR ~ \$125M

STTR ~ \$14M



SBIR - Phase I Contracts: \$100K (6 months)
STTR - Phase I Contracts: \$100K (12 months)
SBIR/STTR - Phase II Contracts: \$600K (2 years)



NASA Strategic Approach

- **Every technology development investment dollar is critical to the ultimate success of NASA's mission**
 - Ensure alignment and integration with Mission Directorate priorities
 - Investments should be complementary with technologies being pursued by
 - other IPP investments and partnerships
 - Mission Directorate programs and projects
 - prime contractors
 - other agency SBIR/STTR investments
- **Ultimate objective is to achieve infusion of critical technologies into NASA's Mission Directorate**
 - flight programs/projects
 - ground or test systems
 - or other uses to advance NASA's mission

Mission Directorate establish high priority needs and existing gaps

- High priority needs are developed into topics for the annual solicitation
- Subtopics may be clustered to support the development and maturation of critical technologies for infusion

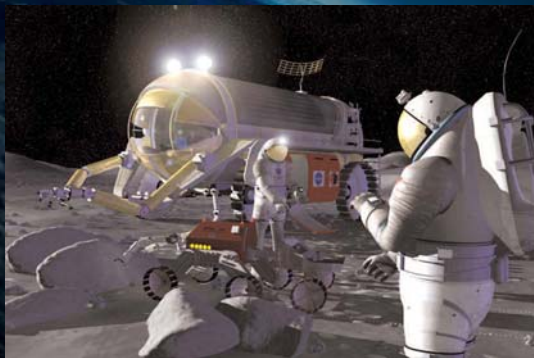


Mission Driven

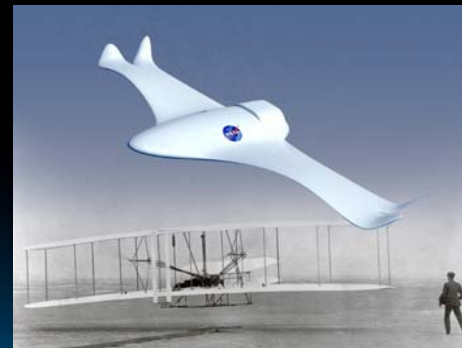
SBIR/STTR = Small Business Innovation for NASA and the Nation

Partnership with Mission Directorates Drives SBIR/STTR Investment

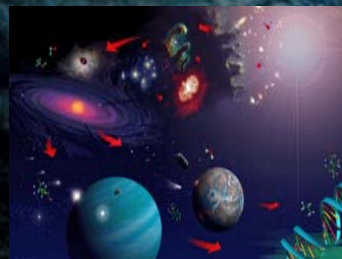
Exploration Systems



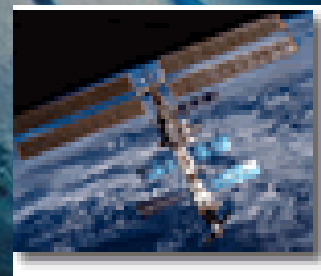
Aeronautics Research



Science



Space Operations





Aeronautics Research Topics

- Aviation Safety
- Fundamental Aeronautics
- Airspace Systems
- Aeronautics Test Technologies



Exploration Systems Topics - 1

- Avionics & Software
- Sensors for Autonomous Systems
- Environmental Control and Life Support (ECLS)
- Extravehicular Activity (EVA)
- Lunar In-situ Resources Utilization (ISRU)
- Structures, Materials and Mechanisms
- Lunar Operations
- Energy Generation and Storage



Exploration Systems Topics - 2

- Propulsion and Cryogenics Systems
- Protection Systems
- Thermal Management
- Exploration Crew Health Capabilities
- Space Human Factors and Food Systems
- Space Radiation



Science Topics

- Robotics Exploration Technologies
- Advanced Telescopes
- Sensors, Detectors, and Instruments
- Spacecraft and Platform Subsystems
- Information Technologies
- Small Satellites



Space Operation Topics

- Space Communications and Navigation
- Space Transportation
- Processing and Operations



PY07 Operating Schedule

Solicitation Development Guidelines	January 24, 2007
Topics from MDs	February 17, 2007
Subtopic description drafts from Cntrs	March 22, 2007
SBIR Solicitation Development Wkshp	March 28-29, 2007
Revise topics and subtopics	May 2, 2007
Official Solicitation Released	<u>July 6, 2007</u>
Solicitation Closed	September 6, 2007
Proposal Review and Ranking	November 5, 2007
Selection Announcement	November 16, 2007
Contract Negotiation	January 18, 2008
Performance Period	January 08 - July 08

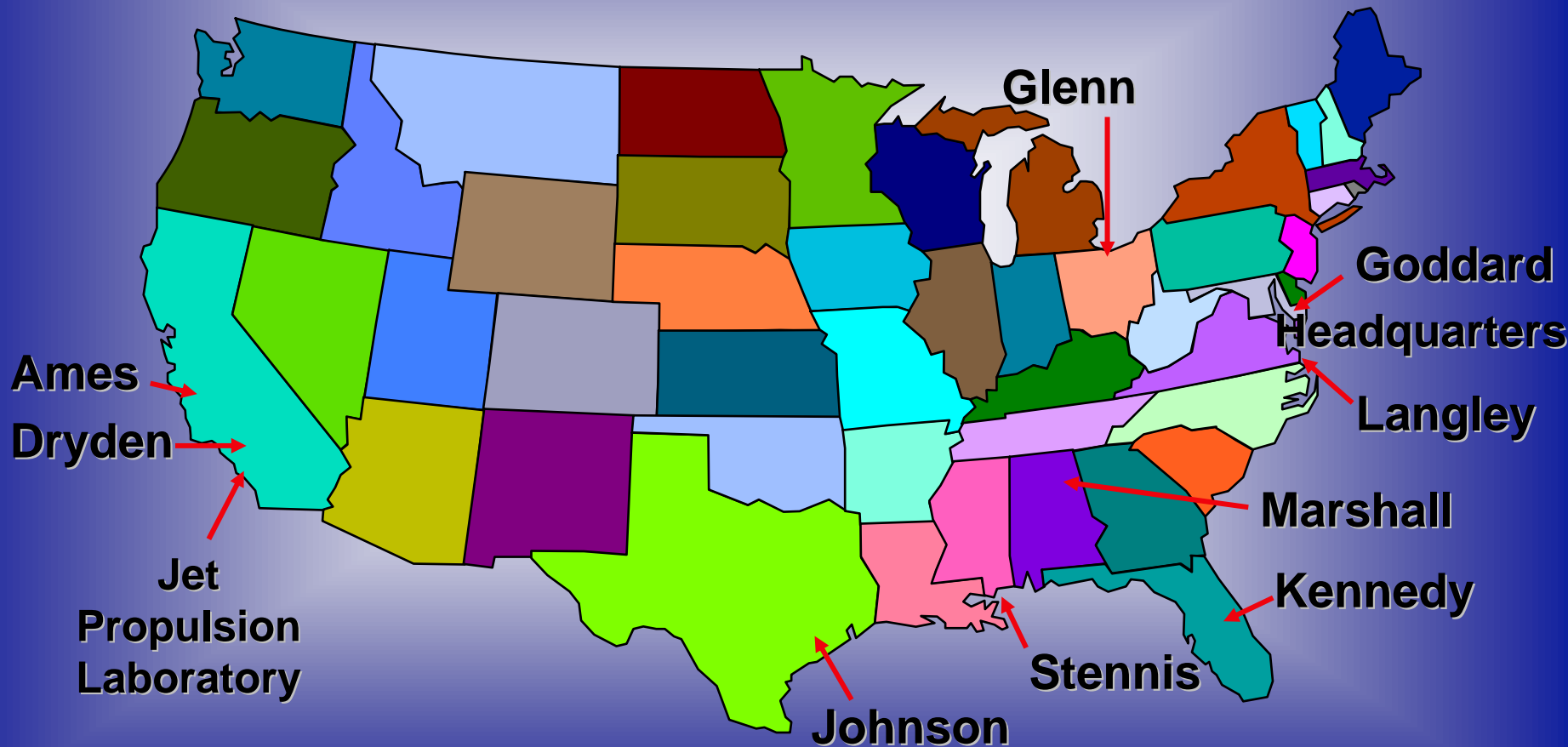


SBIR - Three Phase Program

- Phase I is a 6 month, \$100K effort to determine the feasibility of the proposed innovation
 - Phase I contracts are based on proposals received in response to the program's annual solicitation
- Phase II is a 2 year, \$600K research, development, and demonstration effort
 - Phase II contracts are awarded to successful Phase I contractors
- Phase III is the non-SBIR funded commercialization activity based on the Phase II result. NASA is emphasizing to infusion of SBIR developed technologies into it's Missions program and projects with Phase III funding



SBIR Participating NASA Centers





Nature of NASA SBIR Contracts

- SBIR contracts are fixed price contracts to be completed on a best effort basis
- Contractors own resulting intellectual property (data, copyrights, patents, etc.)
- Government has royalty-free rights for government use of intellectual property
- Government protects data from public dissemination for four years after contract ends



SBIR Program Eligibility Checkpoints

- Organized for-profit U.S. small business (500 or fewer employees)
- At least 51% U.S. owned and independently operated
- Small business located in the U.S.
- P.I.'s primary employment with small business during the project



Submission Process

- All proposals are submitted electronically via the internet
- Make sure your proposal is received on time - late proposals are rejected
- Proposals are screened for administrative completeness and turned over to the managing NASA Center for technical review





SBIR/STTR Electronic Handbooks Electronically-Supported Business Processes

Electronic Handbooks are web-based, database-driven knowledge management tools that securely enable key business processes and data access across geographical, organizational, or functional boundaries



NASA Sets Sights on a 'Paperless' Planet
By Guy Gugliotta
Washington Post Staff Writer
August 19, 1997



Selection Process

→ NASA Phase I Evaluation Criteria:

- 1. Scientific/Technical Merit and Feasibility (50%)**
- 2. Experience, Qualifications and Facilities (25%)**
- 3. Effectiveness of the Proposed Work Plan (25%)**
- 4. Commercial Potential and Feasibility (adjectival)**



Selection Process

→ NASA Phase II Evaluation Criteria:

- 1. Scientific/Technical Merit and Feasibility (50%)**
- 2. Experience, Qualifications and Facilities (25%)**
- 3. Effectiveness of the Proposed Work Plan (25%)**
- 4. Commercial Potential and Feasibility (critical)**
 - Commercial Potential of the Technology**
 - Commercial Intent of the Offeror**
 - Capability of the Offeror to Realize Commercialization**



Selection Process

→ NASA Ranking Criteria:

- 1. Value to NASA**
- 2. Reasonable Chance of Success**
- 3. Probability that Company Can Successfully Commercialize Technology (Phase III)**



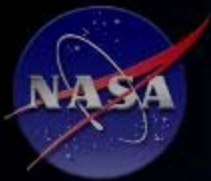
Proposal Tips

- Start early and do your homework
- Lay out the evaluation criteria and write to satisfy them
- Don't pad the proposal to get to the page limit
- Comply with Conflict of Interest rules
- Prepare your proposal in accordance with the solicitation instructions or your proposal may be rejected administratively
- Submit your proposal electronically prior to the final 24 hour rush.



Follow the Directions

- Read the directions from the sponsoring agency
- Address all areas that will be scored in the evaluation by that agency
- Don't underestimate the importance of commercialization
- Suggest topics areas and text, if appropriate to the sponsor
- Mark appropriate proposals as "Proprietary" never "confidential". Mark only those pages that must be protected.
- Submit your proposal electronically prior to the last 24 hours



SBIR/STTR Program Schedule

2007 Program Solicitation

Opening Date: 07/06/2007

Closing Date: 09/06/2007

Selections: Nov. 2007

<http://sbir.nasa.gov>

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